

SYSTEMS AND METHODS FOR ENCODING AND DECODING DATA MESSAGES

ABSTRACT OF THE DISCLOSURE

A system and method for allowing changes to Abstract Syntax Notation One (ASN.1) defined messages without initiating regulatory requirements. The system receives a message formatted according to ASN.1 compatible encoding rules, such as Basic Encoding Rules (BER) or Packed Encoding Rules (PER) and decodes the received message based on a previously stored configuration information file (CIF). In addition, the system encodes ASN.1 defined messages, which are to be sent, using ASN.1 compatible encoding rules based on the information stored in the CIF. The messages are transmitted and received according to a datalink protocol, such as the Aircraft Communications Addressing and Reporting System (ACARS) protocol or the Aeronautical Telecommunications Network (ATN) protocol. In addition, the CIF also defines processing (beyond encoding/decoding) associated with the message.